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Riverside Educational Monographs
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THE TEACHING OF SPELLING

A critical study of recent tendencies in method

BY

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PREFACE

THE purpose of this study is to present a survey of contemporaneous tendencies in the teaching of spelling. It is a summary of the situation in which the elementary teacher finds himself, with some explanation of the forces, traditional and radical, which have molded it. No attempt is made to deal with every controversy or problem; space does not permit. Merely the more important factors have been analyzed, for these establish the structure of our difficulties. When these are understood, the lesser problems find a ready explanation.

Our traditions are frequently very insistent. Often a single mode of teaching will completely subordinate other supplemental means. No less dominating is reform, with its passion for the particular idea to which it has attached itself. The result is that teachers standing in the midst of many practical pressures, are not always able to comprehend the situation as a whole, to view each particular tendency in its relative place and

complete setting. This review is designed to offer the necessary perspective. It outlines the major controversies, traces their recent evolution, and gives some critical estimate of their worth.

The whole effort of the monograph is to study a live situation, for institutional customs have an active molding power. Lay a wide reform upon the school, and the result will always be somewhat disappointing to the reformer. The tradition upon which reform has been laid is not static; it has force and modifies every new idea. There are lines of most and least resistance in every situation, and these must be taken into account in administering any progressive policy. For this reason, the historical method is used throughout. Nothing illuminates the present so much as an understanding of immediately preceding situations. Any basic interpretation of to-day's practices is dependent upon a comprehension of yesterday's.

If the basic method emphasized is historical, the critical method of the philosopher of education has been everywhere superimposed. For mere facts must be evaluated, expressed in terms

of their significance for the school's purposes and given a relative worth in the whole scheme of teaching methods. Hence sociology and psychology, and the other studies from which education gains its scientific criticisms and sanctions, have been utilized in measuring the worth of classroom teaching. The philosophy of education, just because it views education as a whole from norms erected by its own situation, has been used to reveal many inconsistencies, overemphases, and false relations, readily perceived when the elements of the situation are seen in their total setting. Hence the study goes beyond a simple historical tracing of particular methods and a descriptive statement of the manner in which these are operative in the present. It is constructive in that it suggests the particular function of each method and the manner in which these supplement each other in the whole work of instructing children in spelling.

Inevitably the gaps in our knowledge are revealed. Not all the experience we have can interpret the whole story. The empirical discoveries of the teacher, presented in pedagogical

tradition, and the criticisms of the analyst, stated in current theory, fall short of completeness. There is need of a more minute and accurate evaluation of teaching methods which only the experimentalists in teaching can give. For them this study will have worth. It will point the issues which are of practical concern and suggest the definite bits of truth which must be known before we can progress rationally. It is far better that the educational psychologist and the comparative experimentalist in teaching study the issues which are vital to professional teachers. Their results will then be more readily heeded by the great masses of teachers, for the facts revealed by their inquiries will be eagerly received and applied.

It is hoped, therefore, that the monograph here presented will assist in the improvement of our methods of teaching spelling: (1) directly, by giving a wider comprehension of the tendencies now effective in our spelling situation; and (2) indirectly, by suggesting a series of practical problems that require the scientific contributions of an experimental pedagogy.

INTRODUCTION

BY FRANK M. McMURRY

To a large majority of teachers — even of those who are progressive — spelling is a hopeless subject. It seems to lack the possibility of such rich subject-matter as makes reading and history attractive; and to want that organization of its facts that distinguishes every worthy branch of knowledge, since the units that compose it are not thoughts, but merely individual words. In consequence it is recognized as almost entirely a mechanical study, providing little motive for the pupil, requiring little skill from the teacher, and depending mainly on mere repetition or brute endurance for mastery.

Something like a revelation awaits teachers holding the above conception, in the following discussion of spelling. For it is treated as a branch of knowledge that is subject to the same general standards as the most respectable studies. For example, the need of providing for motive, through subject-matter that is intrinsically inter-

esting, is recognized here as elsewhere, and the way of satisfying the need — at least to a large extent — is pointed out.

Mere scattered lists of words are opposed, much as were lists of dates in history or of places in geography; and extensive association is demanded as in other fields where ideas are abundant.

The importance of eliminating much useless matter is urged here, as it has long been urged in arithmetic, and a basis of selection according to real values is proposed.

The influence of individuality on the curriculum is more fully recognized than is usual, inasmuch as the peculiarities of each child are made partial factors in determining the words which he shall learn to spell. And finally, the test of actual use, in determining the thoroughness of mastery secured, is applied in a way to satisfy the most ardent believer in the present functioning of knowledge. In other words, spelling is here placed upon much the same plane, in dignity, with other subjects; it is discussed as if it were a branch that is capable, like them,

of being thoughtfully studied and thoughtfully — not merely mechanically — taught; and the standards to which it is subjected are the same as should be used in testing the worth of subject-matter, method of presentation and text-books in any, or all, other fields.

This point of view has been greatly needed. For, while there has been a movement in this direction, it has not hitherto found so full expression. Every study has a mechanical or formal side, as opposed to the side that appeals to thought or spirit; and in every study there is a marked tendency to center attention on this more mechanical portion, and to rely upon cold drill for its mastery. The newspapers usually call for more extensive *drill* when pupils prove themselves deficient in any line. It is high time for both teachers and parents to understand that drill is one of the clumsiest tools we have in the field of education. Those who so loudly call for more drill, at other times demand more thinking. But the more drill there is, the less the thinking; and the more the thinking, the less the drill that is necessary. Progress in the teaching of every

subject in the elementary school during the last generation can be clearly traced in the diminished dependence on mere repetition. For example, location of places in geography was formerly fixed by going over the list time and again. But as the subject has become more dynamic, location has been subordinated to real thoughts of value; and while location of places is probably more firmly fixed in memory than ever, it is accomplished incidentally while the broad facts that make use of location are under consideration. It is only the poorest teachers of geography who now contentedly rely upon bald repetition, rather than upon thoughtful association, as their main means of memorizing the formal facts.

One's faith in mere drill may safely be taken as a barometer of one's progress as a teacher; and the following discussion will give the reader occasion to inquire where he has been standing in this matter, while showing him how to advance.

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THE TEACHING OF SPELLING

I

THE NEED TO STUDY OUR INSTRUCTION IN SPELLING

OUR teachers are peculiarly sensitive to the misspellings of their pupils. In geography, history, or mathematics they are fairer to themselves and the children in making allowance for inevitable imperfections in the results of their teaching. In spelling they forget that their pupils are growing, not grown; and a lapse or error becomes a source of exaggerated discouragement or irritation. The careful teacher feels a pang of conscience with every misspelled word, and even an indifferent teacher is shocked into a sense of shortcoming, if the errors called to his attention are those of spelling.

Our Sensitiveness to Spelling Defects

It is probable that this professional sensitive-

ness regarding spelling is due to the fact that lay criticism focuses itself more readily upon defects of spelling than upon those of other school subjects. Next to the complete inability to read, poor spelling is to the public the surest sign that one is not educated. One may miss the meaning or pronunciation of a word in reading, and it will be forgotten the next moment; the impression is transient, as attention is rapidly carried along to something else. Let a word be misspelled and the incompetence is recorded as a visible and more or less permanent proof of defect. Hence a poor speller is the first and readiest discovery of the layman. The lay critic, being human in the forgetfulness of his own youthful errors, readily thinks that the children of his own generation were better taught; he then lays the lash of odious comparison upon the teachers of his own children. This criticism is usually ill-founded, for such accurate comparative information as we have indicates the superiority of the actual results attained under modern methods of instruction in spelling. Nevertheless the criticism is terrifying.

Resulting Complexity of Methods

The result has been that energy and ingenuity have been expended upon the teaching of spelling to a degree that is quite disproportionate to its relative place in life and the school curriculum. A decade or so ago this over-emphasis expressed itself mainly in an energetic increase of drill, review, and examination; to-day it shows itself mainly in an effort to invent and utilize better methods of presenting and correcting spelling words. Many new modes of teaching children to spell have been devised; old methods have been dragged from the historic scrap-heap and revived under both old and new names. Contextual spelling, development through multiple sense-association, and phonogrammic classification of words are among the newer ideas introduced; while the spelling match, diacritical marking, and word analysis represent the restorations. Amid all these methods, new and old, representing an unusual complexity of teaching device, it is difficult for the old teacher, much more for the young teacher, to steer himself.

That there is necessity for the evaluation of spelling methods is manifest in the pedagogical confusion that exists in the works of textbook writers, the practice of teachers, and the discussions of theorists.

The Need of Evaluation

The whole situation requires careful analysis in terms of classroom experience and investigation under experimental conditions if the relative worth of various systems, methods, and devices of teaching is to be determined. The obligation for clarifying the situation rests upon the practical methodologists of progressive and investigative turn of mind, wherever these may be found throughout the country. They will need to study our prevalent methods of teaching spelling by every approach; to note their genesis in terms of the various traditions and forces which have originated and molded them; to compare the uses and effects of various teaching procedures under differing situations; and finally to measure the efficacy of our present methods, general and special, by standards of scientific construction.

THE NEED TO STUDY SPELLING

A Preliminary Survey of Present Methods

But before we can reach the all-important stage of a scientific investigation of spelling methods by an experimental teaching that will test their relative efficiency, we must know what our spelling situation is. Description and analysis normally precede experimentation; they reveal the issues upon which current theory and practice express differences of opinion. To describe the status of teaching in spelling we shall need to know the methods in current use, to note the manner of their introduction, the extent of their adoption, the special problems they were designed to solve, and their relation to other methods of instruction which they supplement or with which they compete. We must also render such broad estimates of worth as are apparent to the experienced analytical observer; and finally reveal the important controversies that call for experimental solution.

II

THE CHANGED STATUS OF SPELLING

It is obvious to any careful professional observer that the status of instruction in spelling has greatly improved within a quarter of a century. An increase in the types of teaching employed for both old and new purposes has been a source of fruitful selection. Old methods have given way to new or have persisted against innovations that had less logical claim to success. Among the many devices and methods there has been a struggle for existence on the basis of fitness and for the most part only the better of them have survived. There has of course been much accompanying waste of which we must rid ourselves. But the fundamental factors in the effective teaching of spelling are now readily recognized, at least in degree sufficient to guarantee their extended application. It is the great change in the aim and spirit of spelling instruction which is reconstructing its detailed methods.

It is therefore useful at the outset to know in a broad way the larger tendencies toward change now current among teachers.

Teaching subordinates Testing

A quarter of a century ago the spelling period was given over to the mere hearing of spelling lessons. The teacher heard the children spell the words that had been assigned for mastery, and made the corrections as the errors occurred. More often the children wrote the words in lists as the teacher pronounced them. An oral spelling by the teacher afforded the basis for marking misspelled words. A new list of words was then assigned for the next day's lesson without much anticipation of, or preparation for, special difficulties. Correction on the part of the erring child consisted in writing the misspelled words a specified number of times under scant supervision after school or during a study period. The so-called class lesson was really a daily examination. Under such a system the learning of spelling was a matter for home assignment and individual study. The class exercise was purely

for the purpose of testing the child's knowledge. It did not devote itself either to the careful presentation and development of new difficulties or to the watchful correction of errors. In all its emphases it was primarily a test rather than a lesson.

In most places to-day, the class exercise in spelling is vastly different. The teacher spends his time in carefully presenting a few words, rather than in examining the child's ability in many. New work is a matter of class study, where words are presented with unusual artfulness in order to suggest their meaning naturally through circumstance or context. Every effort is made to safeguard the child against a wrong first impression and an incorrect learning of the word. If a home lesson is assigned, it is not a mere blocking out of a number of words to be learned; the assignment is an exercise in which the teacher uses all his foresight in anticipating the various kinds of trouble the child will meet, focusing the attention on special difficulties and suggesting modes of self-instruction. The modern spelling exercise may test the child's knowledge,

but its primary function is to teach rather than to examine. Here testing is a mere accessory of instruction and completely subordinated to it.

Prevention supplements Correction

As might be implied from the foregoing, the earlier teaching primarily looked for error, which it promptly assumed to correct, though it performed even this task loosely, as we shall later see. As emphasis was laid on testing the child's knowledge, it was necessarily corrective in spirit. To-day teaching in spelling aims to get rid of error by anticipating and preventing it through a watchful supervision of first impressions and associations. This is the significance of the shortened assignment lists, the elaborate development of the meaning and form of words, and the multiplicity of devices for interesting the child in the right observation and use of words. Even the correction of spelling errors has grown more efficient through its companionship with a skilled teaching which aims to avoid unnecessary error. Correction no longer stops with a check mark and a reprimand; it inquires

into cause, makes a truly pedagogical correction, and finally makes certain that recovery from error is complete. The corrective work is done with a spirit and thoroughness designed to prevent the recurrence of the need of correction.

Vital Instruction supersedes Formal Work

What could be more dreary than spelling lists of words unrelated to each other and devoid of vital significance to the child? Such a task must have been to the child what learning nonsense-syllables is to an adult. The gap between the child's need to spell his own words and the adult's demand that he spell certain others is now better bridged than before. To begin with, the first spelling that the child undertakes is a translation of his own speech into sight symbols so that another may read his thought. When spelling instruction becomes more systematic, words outside the child's active vocabulary are not directly imposed. They are brought in indirectly. He is given the experiences that bring the new terms into his life as appropriate symbols for his new thoughts, feelings, and deeds. He is stim-

ulated to speak of these new pilgrimages into knowledge and to write of them. Then the spelling of a word that was very strange yesterday is no dull task; it is the acquisition of a technique, as necessary from the child's standpoint as from the adult's. Such is the changed spirit of spelling instruction in our schools. It has become a vital, well-related business where before it was unmotivated and isolated; it is now real where before it was formal.

Change in the Type of Motivation

One can well imagine the type of motivation used under the older methods of teaching spelling. The words were too frequently related to the child merely through the teacher. The child did not feel any direct relation to the word, but he did to the teacher. His dependence upon the latter was obvious. He learned the spelling word in order to get along with the teacher. The teacher thus became an end in education, not a means. It is easy to note the type of motivation which would be developed in such a situation. It was coercive and harsh, emphasizing all the

qualities of mind that accompany subservience to a master, or rivalry with one's fellows.

The value of such spelling was extrinsic, not intrinsic. And even the extrinsic worth of spelling to the child was not fundamental, but adventitious; it referred not to his permanent ability to express himself, but to his transient and conventionalized relation to the teacher. The glory of success in the competition of the spelling match typified the kind of motives used to stimulate the good speller; the deprivation and shame of being kept after school were indicative of the deterrents which kept the poor speller from an utter neglect of the spelling book.

It would be well if we could say that all this has passed. It has not yet done so with any completeness in current practice; but in spirit and in policy we have already accepted the standard that good instruction in spelling depends upon improving the quality of motivation. Practical teachers no longer argue that the spelling period should not have a content of its own. This is debated only where the problem is academic. The original demand to spell a word may come

from outside the spelling period, but the teacher through the introduction of proper basic experiences in the spelling lesson will try to create a demand for the word then and there. Thus the spirit of naturalism which is slowly driving artificiality out of the schools is, with the artistic teacher, making spelling vital to the child. There is now interest wherever spelling is well taught; the children are active not dull, eager not driven.

Spelling reflects General Educational Progress

These changes in the spirit of instruction in spelling are largely reflections of general progress in teaching method. Spelling within the domain of its own special methods has been a follower rather than a contributor. It has even been tardy in its followership. But this is to be expected since spelling is a secondary subject in the curriculum; for one does not need to spell till one has something to say and wishes to write it. Logically, or psychologically, speaking, spelling as a subject makes a tardy entrance and an early withdrawal. In this respect it is like that other subordinate subject — penmanship. For

this reason the progress and status of instruction in spelling are largely determined by its relations to other subjects, more particularly in recent decades to reading and written expression. Hence we have the need to trace the relation of spelling to the other subjects.

III

THE RELATION OF SPELLING TO OTHER SCHOOL SUBJECTS

The Early Connection of Reading and Spelling

In the beginning the subject of spelling was closely associated with the subject of reading, a relation somewhat difficult for the modern trained teacher to understand, since spelling, like penmanship, is a technical equipment made necessary by the demands of written expression. The connection is explained by the history of the school curriculum and methods of teaching during the colonial period. The first schools were reading schools, founded that children might read the Bible and understand the word of God. The method by which early reading was taught was the spelling or alphabetic method; and down to the early part of the nineteenth century the school regulations called for teaching children to read "by spelling the same," that is, through learning the alphabet and spelling the letters of

words so as to approximate the sound of the word.

Its Influence

This early association of reading and spelling had far-reaching influences. It biased the content of spelling. The materials of the latter subject have always been drawn more frequently from reading than from other school studies. In addition, the early methods of using the alphabet to teach reading were soon fastened on to the teaching of spelling. There they have persisted. One has only to mention oral spelling, diacritical markings, and syllabication as devices used both in beginning reading and in formal spelling to note the connection.

Spelling as a Separate Subject

A little later spelling was differentiated from the subject of reading, largely because of the appearance of spelling books which gave it more or less of an independent existence as a formal subject. This position was maintained throughout most of the nineteenth century. Whereas its

content had been determined mainly by the matter that children had read at school, its new character as a group of dictionary lists increased its independence, and spelling was taught without much reference to its relation to the other subjects studied at school. It had reached its extreme place as an independent discipline, and in consequence was less vital in its selection of content and more formal in its methods than at any other period.

The Movement for Correlation

Toward the end of the last century the advent of a general pedagogical movement which tried to correlate each subject with every other, had its influence upon spelling. But the influence upon spelling was more lasting than on any of the other subjects, largely because spelling had attained an unusual independence and formalization, less warranted perhaps in the case of spelling than of other studies. The more enthusiastic of these correlationists argued that spelling had no content of its own and that it should receive its materials from other subjects. Hence, geo-

graphy, history, grammar, arithmetic, and science made their contribution of words to the spelling period along with reading. Others went so far as to propose that the spelling period be abolished and all necessary spellings be taught "incidentally" during the other class periods.

These radical measures, which were the inevitable influence of the teachings of the American Herbartians, did not gain a wide acceptance, nor did they endure to any extent among the enthusiasts themselves. Recovering from its partial obliteration and its temporary subordination, spelling once more resumed considerable independence as a school subject. But the temporary domination of other subjects over spelling was influential for good. Never again has spelling become as formal as it once was. Its forms have come into relation with the situations requiring them, and spelling has been taught more vitally ever since.

The Present Relationship

If the pedagogical principle of correlation broadly blazed the way for the more accurate and

vital relating of spelling to other subjects, an important quality in characterizing its present status, it remained for psychological analysis definitely to point out the manner of its achievement. The present-day view is that spelling as a school subject is intimately dependent on written composition or expression. The child's need to spell is directly called into existence by his need to express himself in written symbols. The domination of reading over spelling is purely an historic accident that persists influentially in pedagogical tradition. The school child of to-day may read without knowing much about spelling. The smaller vocabulary of written composition rather than the larger one of reading should set the task of spelling. In theoretic acceptance spelling is therefore psychologically subordinate to written composition, and all the better movements toward change in the relationship of spelling with other subjects point in that direction.

In actual practice this theoretic status is not fully realized. The ordinary teacher finds it difficult to break with tradition, and the average textbook-maker responds rather intimately to his

market. The latter has, too, the very great difficulty of prearranging subject-matter, and thus becomes a further brake upon progress. It is not surprising, therefore, that spelling books have been modified slowly. They still go their traditional way, although not so much as before. In the mean while, the average teacher with consistent progress modifies what is given him in the text by adding words from the spontaneous work of the composition period.

IV

THE SELECTION OF SPELLING MATERIALS

THE source of the words taught in the spelling period has been largely suggested above. The changing relationship of spelling to the other school subjects unavoidably affects the spelling vocabularies utilized. But a further view of the matter is necessary in order to indicate the more detailed influences which determine the selection of words for study.

The Importance of the Textbook

Ideally speaking, the words of first import to a child are those he needs for his spontaneous written compositions. In practice the school cannot make adjustments so fine as such a theory would suggest. Just because school teaching is a systematic business it must proceed by some plan, in a more or less systematic way. This does not at all imply that its methods of procedure must be artificial rather than artful or

artistic. As all children do not have the same needs, and those they share do not come into use at the same moment, the school strikes a compromise and uses a plan of its own. In consequence, the material laid down by the course of study and the adopted spelling text really determines the words used by the greater number of teachers. In most courses of study the speller is the course. For this reason, the manner of textbook-making is an important element in understanding our situation.

The Influence of the Earliest Spellers

That many of the first texts in spelling were "desk-made" seems obvious to one who examines them. They certainly were not determined mainly by schoolroom experience. In fact, laymen frequently wrote spelling books, mere philological erudition being regarded as a more important qualification than experience in the primary school. Such authorship would not commend a manuscript to a publisher to-day. These books naturally imposed adult standards in the selection of words and disregarded the child's use of

them. The words were more likely to be taken from dictionaries than from school subjects. Such classifications as were given to the material represented an adult logic, and the grading of words was mechanical rather than psychological, the difficulty of a word being largely measured by the number of syllables it contained. On these initial wrong assumptions the first traditions of the spelling book were established. And the traditions have become stubborn, as every reformer has found.

The difficulty with our spelling books is that they are descendants of each other, a new book being a modification of an old one. Even teachers of long experience have not essayed to utilize their first-hand experiences as more important determinants than established convention. This accounts for the persistence of "desk-made" books even when teachers with wide practical experience write them. Words which children and ordinary people never use are still included, and they are classified and graded after schemes that do not even approximate any real child's needs.

Books based on Classroom Trial

It is not until we come within a decade or so of the present day that the laboratory test of classroom use is applied to spelling lists. It cannot be said yet that it is demanded by teachers; it is offered as a recommendation by authors and publishers under the pressure of sharp competition in book adoptions. The prefaces of recent spellers contain such statements as the following: "This speller has been in successful use for a number of years"; or, "The words in this speller have been selected from lists supplied by principals and teachers in the schools of six cities"; or, "The words given in each grade have been thoroughly tested by a large number of teachers." Publishers of school texts have been known to publish advance texts for a year's trial in the classroom prior to the publication of the sale edition. The influence of such empirical standards has been marked, particularly in eliminating words of infrequent usage, in reducing the number of words included, and in classifying and grading words according to the interests and capacities of children.

SELECTION OF SPELLING MATERIALS

The Need of investigating Adult Vocabularies

It cannot yet be said that investigations have been conducted to show which one, two, or three thousand words are of most frequent usage among adults whose vocational station in life is determined by the fact that they have not gone beyond the first eight grades of school. We do not yet know with any show of accuracy which of these are seldom misspelled and which are persistent sources of error among large numbers of people. Our social standard is merely an inaccurate tradition of the spelling-book makers, somewhat modified by the personal judgment of the particular authors and the protests of teachers who compel some revision. We have still to achieve a careful investigation into the vocabularies of adult life which set the spelling demand and give us our problem.

Supplementary Spelling Lists

While the domination of textbook material has been large in the spelling period, it must be said that it decreases. Texts are now so frequently supplemented by word lists made by the indi-

vidual teacher in the course of teaching his particular class that the sources of these supplementations should be stated. These additions are of three types: (1) grade lists, (2) class lists, and (3) individual lists.

Grade Lists

Teachers of particular grades within a single school system frequently build up more or less permanent lists from the various textbooks used in the course of study for their particular grade. The mastery of these words in advance of or parallel to their appearance in the normal course of instruction is chiefly preparatory and preventive. Growing out of the teacher's experience of actual spelling needs with the course of study as it is, such grade lists afford a much more vital and efficient series of words than the speller. The speller is an adjustment to country-wide conditions; the grade list to a particular school system with a fairly uniform course of study.

Class Lists

In addition many individual teachers maintain

class lists composed of difficult spellings and actual misspellings which occur in the written exercises of a considerable number of the class. If the children ask how to spell a word for which the teacher has not provided, the word is spelled for them and then assigned to the next spelling lesson. The children keep regular blank books for such words as are thus assigned. Children are not allowed to guess at a spelling; they are told the spelling or asked to go to the dictionary, and the fixation of the word is tested at the next recitation. The same method of treatment applies to misspellings corrected in the class periods assigned to other studies. Thus the correction of special class errors in spelling is efficiently followed up. Such lists are reconstructed with each year, though the materials of different years afford a stable source of selection for grade lists.

Personal Lists

In addition to the grade and class lists there are personal lists for each child, usually kept in the same blank book as the class list. As a child writes on any subject, particularly in English

composition, he is encouraged to write down (1) every doubtful spelling for later investigation and mastery, (2) every word the spelling of which has been told him by teacher or classmate, and (3) every word that is marked as wrong in the work returned to him. To recruit further words for individual needs a special exercise is sometimes given in the form of spontaneous spelling lists. Each child writes all the words he can think of as rapidly as possible. The misspelled words are then corrected and placed on the personal list. This is not so good a source as the day to day contribution which comes from the written exercises of the language period, but it supplements it. These personal spelling lists are then frequently checked up by the teacher. The personal spelling list is the finest adjustment of materials that the school can make. It represents a provision for individual variation which is quite remote from the gross and approximate adjustment of the spelling-book material.

The source of spelling words has thus greatly improved. It has more and more provided words that the child needs; less and less imposed little-

used words that have no significance for him. Spelling has come to deal with the child's real spelling needs no matter in what subject they occur, but more particularly with those that arise in connection with written composition. The adjustment of word lists to individual needs has become more refined; the spelling book's broad guess at need is, in the case of the progressive and industrious teacher, supplemented by grade, class, and personal lists.

V

THE GRADING AND CLASSIFICATION OF WORDS

THE standards which have determined the composition of spelling lists to be taught are the school's rough approximations to the actual social demand which says that each child should finally know how to spell the words of most frequent usage among ordinary adults. Crude as these approximations are, they are a recognition of the social factor in the construction of the course of study. In so far as spelling materials are to be selected and rejected, it may be said that our problem is primarily sociological; in so far as they are to be graded and classified in adjustment to the child's point of view and ability, it is psychological. Having given some statement of the actual way in which spelling words have been selected, we ought now to be concerned with the manner of their arrangement in texts and teaching. We have then to consider the grading and classification of spelling words.

Grading by Number of Syllables

The first spellers graded words in terms of their complexity, by the arbitrary numerical method of classifying words according to the number of syllables they possess. If the word had a few syllables, it was easy; if it had more, it was harder. So long as irregular words were excluded from such lists, this method of grading did well enough. But the pressure of the children's needs inevitably tended to introduce words that children were using, quite regardless of the fact that the correspondence between pronunciation and spelling was imperfect. Children would try to write the words of their ordinary speech, and these came into spelling lists slowly but surely. The appearance of such irregular words at once exposed the fallacy of grading merely by syllabic length. An irregular word of three syllables might be more difficult than a regular word of five. And the observant teacher must have noticed frequently that a child, wishing to spell an irregular word useful to him, might learn it more readily than he would a regular word, imposed

on him by the spelling book, when he did not know its meaning and consequently felt no spontaneous need for its use.

New Bases of Classification

The result was that two new bases of classification tended to supersede the old syllabic gradations. In increasing degree words were classified (1) by their common structural or phonetic elements, and (2) by their association through meaning or use. The first basis of classification is illustrated where words having a common sound are grouped within a single lesson. The second basis is exemplified where the lesson is made up of the specific names of objects belonging to the same general class.

Classifications by Structure

The first of these bases of classification seems to hold priority in the development of spellers. This might well be expected, since grading by syllables is a structural classification of a somewhat simple sort. It gave an impetus to the grouping of words by phonetic structure. The

introduction of needed irregular words only refined and differentiated the classification by phonetic structure. Words were grouped on the basis of common sound elements — vowel, consonant, diphthong, or digraph. Thus words were put in the same group when they contained a letter *a* which has the sound of Italian *a* (*hark, palm*). Again words were put together on the basis of sound equivalence regardless of the varied spelling of the classifying sound (*dairy, day, great, inveigh, they, gauge, gaol, aye*). On the same principle homonyms were taught together (*their, there; too, two, to*).

The principle of classification by common sound structure finds its most recent and enthusiastic revival in the grouping of words by common phonograms (*action, fashion, region; enough, rough; fight, light, sight; urbanity, humanity, sanity*). Such grouping of common regular elements in words is a modern substitute for the older method of syllabication.

Classifications by Meaning or Use

The second basis of classification is not so

formal, as it is concerned with the association of words through their meanings or uses. It is a very common practice of spelling books to group words standing for particular things within a general class. Thus, *polo*, *tennis*, and *golf* would be classified together under *athletic games*, and *drum*, *fife*, and *bugle* under *musical instruments*. The study of groups of synonyms (*blame*, *censure*, *convict*, *denounce*) and of pairs of antonyms (*ratify*, *abrogate*; *conquer*, *surrender*) are arrangements made upon the basis of meaning. Less frequently, words are classified according to their uses, as when the entire lesson consists of adjectives, nouns, or participles. Here the grammatical use suggests the meaning only in a very broad and vague way. These classifications in terms of meaning and use represent the first attempts to get content into isolated spelling words by natural association. Later words were given meaning by formal definitions. The most modern grouping of words by meaning and use is the spelling of words in the context of sentences and paragraphs. Here the words assigned for a first spelling lesson appear in their normal context

and grammatical use as parts of interesting sentences. Spelling from dictation or in spontaneous composition is the last arrangement of spelling words in terms of meaning and use.

Classifications upon Both Bases

There are many classifications of spelling words which do not fall completely under either of the types mentioned. They represent classifications upon mixed bases, taking into account both structure and meaning. Sometimes one factor or the other plays the more important part, both being present. Thus, classifications of words by common prefixes (*improper, impolite*), common suffixes (*audible, visible*), or common stems (*export, portable*) suggest common meaning and structure by virtue of their similar derivation. When singular and plural, masculine and feminine, nominative and possessive forms are studied in relation to each other, we have similar cases. They carry an association through meaning in order to focus attention on the variation in form. The same is true when words and their abbreviations or contractions are studied.

Thus from simple alphabetical spelling, syllabication, and the verbal definition of words, our grading and classification of spelling words have gradually passed to more varied methods of grouping in terms of meaning and use. The bases of grading and classification in use are now many. Frequently they represent mere duplication of means, but more often they add to the richness of our teaching methods, one device supplementing another.

VI

ASSOCIATING MEANING, PRONUNCIATION, AND SPELLING

The Three Factors to be associated

Ability to spell includes more than the power to recite the letters composing a given word in their conventionalized order. It involves an accurate command of that fact in connection with two others, namely, meaning and pronunciation. A word is never well taught unless some time within a spelling period, or a series of periods, the teacher makes certain that the pupil has (1) its meaning, (2) its pronunciation, and (3) its spelling. And these three factors must of course be known in full and appropriate association.

It is altogether possible that the teacher may not have to develop each of these factors. The word may have been learned elsewhere and have become part of the child's oral vocabulary, — which is to say that the child has already associated its meaning and its pronunciation but not

its written form. But the conscientious teacher cannot assume that this is true. He must test the fact. The failure to do this registers itself most conspicuously in the poor results obtained with children of foreign birth, who have not the English speaking child's oral basis. If the child knows the word for the purposes of speech, then the teacher has only to develop the order of letters composing the written symbol, and to associate that fact with the meaning and pronunciation already acquired. If the child does not know the word at all, then the teacher must begin his work at the foundation, and (1) develop the meaning of the word through experiences of active, objective, or other intellectual kind, (2) make sure that the pronunciation is thoroughly acquired as a by-product of this first activity, and then (3) develop the proper spelling in association with the word's meaning and sound. Only by a firm insistence upon the inclusion of each of the three factors within the teaching procedure can we make our instruction in spelling competent.

Formal Work neglects Meanings

Too often in the past, when spelling was regarded as a formal subject, pronunciation and spelling have been associated to the neglect of the meaning of the words taught. The development of alphabetic, phonetic, syllabic, and phonogrammic methods of teaching words, along with other devices of classification or procedure which emphasize the relation of sound structure to sight structure, tends to subordinate the use and the significance of the words, if it does not omit them altogether. Too much emphasis on the mechanics of spelling makes the instruction formal precisely because it isolates these sound and visual forms from the meanings and uses of the word.

The Newer Methods correct this Neglect

In so far as the newer methods of teaching spelling avoid overstressing the formal structures of words and treat in the largest possible units, the tendency toward a false emphasis is decreased. Syllabic and phonogrammic spelling of

regular words seems better than a phonetic letter treatment. And dealing with irregular words as wholes, to be learned without subdivision, moves in the same direction.

The reform is more than negative and corrective, however, for many of the present methods of teaching are calculated to enhance the content side of spelling. Supplementing list-spelling with contextual spelling, and the definition of words with actual experiences in the use of words are instances in point. A similar result is accomplished by the recent insistence on conversational and other oral work as an introductory basis for formal spelling.

Inadequate Presentation of Essential Factors

Many of the traditional methods having a widespread present acceptance are supposed to present the appropriate meaning, pronunciation, and spelling, when in reality some inadequate substitute is given in their stead. Three illustrations will suffice to make the criticism clear, without encroaching on the more detailed discussions which follow.

It is frequently the case that teachers give children a definition of a word, assuming that by that act they have acquainted the child with its significance and use in a dynamic way. The child may merely memorize the words of definition as an addition to the memorized order of letters, and the slovenly acceptance of an apparently proper use of the word in a sentence (which is often ambiguous) fails to show the defect of the original teaching.

In the case of pronunciation, failure of this sort is less likely to occur, because classroom exercises are so largely oral that improper pronunciations may quickly be found out and corrected, even if badly taught. The exclusive use of written spelling from dictation by the teacher, while making some provision for the presence of the spoken word, may not do so in sufficient degree. We know how often in life we understand a spoken word that we ourselves cannot pronounce. The teacher must not assume that the child knows how to pronounce a word merely because he has appreciated its meaning and written it correctly. Some oral response upon the part of

the children themselves should be provided. Our tests are too frequently written. The old-fashioned spelling matches and other oral recitations (where the word is pronounced before and after spelling) have a marked advantage over some newer modes of written instruction.

If the use of oral spelling with pronunciation has the advantage of guaranteeing the right sound interpretation, its exclusive use is defective as a means of conveying context. Perfect oral spelling of unrelated words in lists, one of the old-style ways of teaching, does not assure us that the child will spell the same words perfectly in his spontaneous written compositions. Oral letter spelling is primarily an association of sound with the motor activity of the throat; written spelling is mainly an association of a visual whole with certain muscular activities of the hand. They may or may not imply each other. Again, words in isolation, spelled correctly with full attention upon them, may be misspelled under the distractions of real written expression, where the pupil's thought, not his spelling technique, is the main thing in his mind.

The Need of Skepticism as to Special Methods

Teachers need to be cautious in assuming that a given exercise in spelling has developed meaning, pronunciation, and spelling in a real way. Each special method mentioned above probably has its advantages, but its disadvantages are also obvious to any one who will make a close analysis. It is improbable that any one means of teaching spelling will be adequate. We need to be suspicious of systems based on one idea, here as elsewhere. It is far more probable, upon the basis of what we already know from analysis, without the more incisive aid of experimental investigation, that many methods will be required in order that the weakness of any single mode of instruction may be corrected. At any rate, teachers should be skeptical of the loose assumptions of both traditionalists and reformers, and insist upon a close examination of the fitness of teaching means to attain specific pedagogical ends.

The Proper Sequence of Association

It is not enough to have each factor properly

developed by itself and then related to every other. Use establishes an efficient sequence for the associations acquired in the spelling period. The normal sequence employed by a first or second grade child when spelling a word would be to proceed from the sense of the situation to its oral expression, and then to its written expression. Of course no such slow, orderly succession of stages is apparent, but something of this order of procedure is characteristic of the quickest associations. Lessons in spelling often do fix these associations in an opposite and unnatural order. It is not unusual to see children copying meaningless words from the blackboard, repeating their pronunciations after the teacher, and discussing their definitions with him. One textbook writer approximates, though he does not fully fulfill, this distorted order when he says that the best sequence in which to teach spelling is as follows: (1) Pronounce the word; (2) spell it both by letter and by word; (3) discuss the meaning; and (4) use the word in a sentence.

Of course the teacher may for convenience take up the various factors in spelling in differ-

ent orders for special and transient purposes of his own. But he is bound to correct and supplement them, and finally to leave a total impression with the child which is normal to his uses.

The Method of Multiple Association

But such concrete practices as have been cited are probably great improvements over the older teaching. There was no real order of activities in the older teaching because it merely repeated the oral or written spelling throughout the recitation period. The gain of modern teaching is found in the fact that it takes more versatile care of all the factors involved in accurate spelling within a short space of time, within a single recitation, and even within a unit of movement in the class exercise. One thing is certain, modern teaching is richer in the associations it brings to spelling. It not only teaches a fact but it does it in many vital ways. It uses the principle of "multiple association." It develops the meaning through definition, the context of written sentences, discussion, and the personal experience of action and observation. It utilizes every chan-

nel of appreciation and expression in associating the form of the spoken and written word; the ears hear, the eyes see, the voice mimics, and the hand copies the form of the word — all within the minute or two involved in the first presentation of a new word. Fullness of association, richness of connotation characterize the child's possession of the newly learned word.

In no other aspect of spelling instruction has there been more improvement than in the methods employed to associate the three necessary factors of meaning, pronunciation, and spelling. The improvement is largely one of enriched resources. It cannot be said as yet that the average practitioner makes a discriminating use of them. At present he is likely to be confused by the numerous and complicated means at his disposal. Nevertheless the wide range of methods we now have has already (1) given a fairer emphasis to each of the factors essential to good spelling; (2) developed more useful ways of comprehending them; and (3) fixed them through vital and numerous associations.

VII

TEACHING THE MEANING OF WORDS

As spelling has improved in its methods of teaching, it has steadily given a larger place to the development of the meaning of words within the spelling exercise. A progressive teacher of the present day will have as much vital experience for the child in spelling as in geography or history.

Dependence of Early Methods upon an Oral Vocabulary

In the beginning, the pedagogical practice of the spelling period assumed that the child already had the word to be spelled in his speech. And the assumption was approximately true as long as spelling was dominated by the traditions which made it an activity closely connected with writing and reading. The written exercise called for meanings and words the pupil possessed in all respects save in the ability to spell. The reading exercise developed the meaning and pronuncia-

tion, leaving the writing of the visual symbol to the spelling period. If this tradition and practice had endured, the failure of formal spelling would not have become apparent so soon. But two causes operated to increase and reveal the inefficiency of formal spelling. One was the change in spelling vocabularies; the other was the growing heterogeneity of the school population.

Causes operating to force Content into the Spelling Period

It has already been noted that, with the appearance of special spelling books, spelling detached itself from reading and writing and became an independent school subject. The spellers became a collection of dictionary lists, and words were taught which had little to do with the child's personal or school needs. In consequence he was put at the acquisition of spelling words that were not within his oral vocabulary, and he tended to learn them superficially because the spelling period gave practically none of its time to developing a content and oral basis for the spelling of words.

The growing heterogeneity of the American

school population had precisely the same effect, but it operated from the opposite direction. With many children of foreign birth or descent entering the schools, it was less easy to count upon a common vocabulary of spoken English among school children. Even the American-born population, stratified by the growth of cities and the economic and social differentiation of the people, came to school with fewer common experiences and words. As geographic locations, economic and social situations, and nationality affiliations became more varied, the oral vocabularies of young children, largely the outcome of their social environment, became exceedingly varied. Thus less reliance than before could be placed on methods of formal instruction which assumed a common experience and speech.

The total effect of both causes was to reveal the need to supply an increased basis in content and speech within the spelling period. The spellers themselves show the change. Classification of words by meanings, the appearance of definitions and sentences, are the responses which early authors made.

The More Recent Attempts to give Meaning to Words

But the modern writer of texts has carried the response much further, and the progressive teacher has gone far beyond the existing texts in his attempts to develop the meanings of words.

In a sense the first method by which school children got the meaning of new words was the contextual method. This was true when spelling was a part of reading, and children got the import of words by themselves without any conscious instruction by the teacher. Getting the meaning through context at this period was scarcely a method in the sense in which we here use the term, that is, as professional technique consciously devised as means to an end. Probably the first important conscious attempts of the spellers to develop meaning were connected with the use of definitions. The method, of course, was synonymic,—a word, phrase, or sentence equivalent being used. Of course, in practice the discriminating teacher supplemented the

definition (given orally by the teacher or presented in the book) by giving examples of its use, wherein the word's setting made the meaning clear. The texts attempted to supplement the definitions by adding sentences containing the words. In the latest works the sentences are themselves placed in paragraph setting. At first these sentences were as mechanical and as unnatural as the first sentences in reading primers. They were artless inclusions of the words given in the spelling lists. This is particularly true whenever the word lists are classified upon a phonetic basis. Then the sentences are made accessory after the fact of selection. But in the spellers which classify mainly by thought association, the sentences and paragraphs are accessory before the compilation of the columns of words, and hence are more likely to have an appealing content and a natural construction. This contextual material, following the trend of later reading books, is more and more selected from interesting literary material. The prose selection and the poetic memory gem are now of frequent occurrence in spellers. Some spellers are as rich

in content as the best language books, and, in relation to the amount of formal work to be carried on, provide a relatively broad basis.

Many of the best spellers which add content to the word lists do so by adding rather than by both prefacing and adding sentences which employ the word. The limited space of a text which compels some omission gives them a choice of two evils. Hence, they leave it to the teacher to lay a foundation that insures the meaning of the word. The characteristic practice even among the best books is to have the word followed by a sentence including it, or by the original paragraph or verse from which the word has been taken. Very few books present the sentence or paragraph first and the word or lists of words later. As the order in the book very generally determines the way the child attacks his spelling, the teacher should be cautious to develop the meaning of words contextually before turning to the text.

The average teacher is really far more open to intelligent suggestion than the ordinary textbook-maker, and many progressive classroom in-

structors who refuse to use the speller slavishly are doing much to increase its effectiveness. But the textbook's conservatism frequently gets in the way of normal influences making for progress within the school itself. A case in point may be cited. With the youngest children, before any spelling work is used, the teachers present the meaning of words through direct sense experience by utilizing the children's activities as a basis; thus games, "action work," objects, and pictures are some of the concrete bases used in the first spelling lessons. Such methods too often cease suddenly with the appearance of the speller in the second and third grades. The textbook in spelling cannot provide objective demonstrations effectively and it rarely offers an adequate substitute in the form of pictures. It is somewhat curious that the illustration, which is the textbook writer's substitute for objective work in all the other school subjects, should be used so slightly in spellers, at least through the first few grades. This neglect of pictures is peculiar to the speller. Pictures could be used with effectiveness here exactly as they are in readers

and language books. But convention seems to have decreed a low-priced speller in which the additional cost of adequate illustration is not financially feasible. In time we may hope for illustrated spellers. But there would be little gain if pictures were used with no better judgment than is displayed in current texts in other subjects.

VIII

TEACHING THE PRONUNCIATION OF WORDS

How the Problem of Pronunciation enters

So long as the words taught in spelling are those the children use, there is no problem of pronunciation except to correct such mispronunciations as have stolen into their vocabularies. Somewhere in the normal course of their daily lives, in school and out, the children have gained an experience along with the oral symbol which stands for it. The problem of teaching pronunciation in the spelling period arises out of the fact that many words are first presented to the child in the written or printed form. He is called upon to learn the technique of their spelling without knowledge of their sound or their connotation. Hence the need to teach the pronunciation of unknown words is a demand arising from an abnormal situation, one which is not altogether avoidable in the school.

The Artificial Intimacy between Pronunciation and Spelling

The traditional way of handling such a situation was to gain the pronunciation as a by-product of learning to spell the word. Thus instead of getting the experience and the spoken word together, in the manner normal to children and men, the school coupled spelling and pronunciation, and neglected to pay due attention to the third element, the basic experience which gives it meaning. This is well demonstrated by the contemporaneous spellers of the more traditional sort. These lay their greatest emphasis upon the machinery for translating sounds into spellings, and spellings into sounds; sounds are changed into spellings when the words are already in the speech of the child; spellings are translated into sounds when the words are those the child sees for the first time in print. The prominent place of diacritical marks, the classification of words by common sound, and the division of words into syllables or phonograms are indicative of the fact that the basis for learning words was shifted

from a natural alliance of pronunciation and experience, to an artificial alliance of pronunciation and spelling, which might or might not be accessory to learning the meaning. At any rate meanings were subordinated in the teaching process. If given at all, they were presented in some incidental and inadequate way. The whole situation is a reversal of the normal situation, a clear case of putting the cart before the horse.

Restoring the Natural Relation between Pronunciation and Meaning

The practical teacher with psychological insight accepts the inevitable fact that children are bound to meet new words for the first time in written or printed form. He has no serious quarrel with the proposition that spelling words cannot always be taken from the child's developing experience and speech, as these enlarge in the other class exercises and out of school. But he does not allow this accident of school administration to determine the starting-point and the mode of his teaching. He foresees the fact, and leads the child up to the spelling by exer-

cises which give an empirical and an oral basis, which is merely to say that when basic experiences or oral uses have not been provided for the child in the normal course of events, the teacher provides them in the spelling period. This explains why the spelling period in the best of the modern classrooms is no longer preeminently a formal and meaningless translation of sight symbols into sound symbols, and *vice versa;* but a natural and interesting exercise in which plays, dramatizations, objects, pictures, and conversations are characteristic instruments in approaching the spelling of words. The teacher has simply made his teaching natural to life in spite of the fact that he is confronted with an artificial situation. The whole consequence of such change in the spirit of spelling instruction is not at once obvious. But close analysis of recent tendencies indicates the result in detail.

Three Modes of getting Pronunciation

There are three general modes through which the child may get the pronunciation of such words as enter his life through the spelling

period. (1) He may obtain it by imitation of a sound model, through the speech of his teacher, or his fellow students. (2) He may obtain it through direct phonetic translation of the letters in the word, that is, by means of such conventional and artificial devices as diacritics, syllabication, and phonograms, or through the analogies in form between the words he can pronounce and the new word which he cannot. (3) He may utilize both the methods just mentioned, adding such additional techniques as are needed to get the pronunciation from the dictionary.

The Emphasis of Progressive Practice

Whereas the teacher of a few decades ago, so far as conscious efforts were concerned, used the second method almost exclusively, the more progressive teacher of to-day lays the main stress on the first method. The younger the children the greater is the stress on oral imitation. The amount of phonetic translation has very generally decreased, and the burden of it, when it is used at all, comes on the oldest, not the youngest pupils. In giving children immediate

power over the pronunciation of words, the method of example and imitation practically supplants that of artificial phonetic translation. The latter method enters the class exercise conspicuously as preparation for consulting the dictionary, an activity which aims not at immediate acquisition, but at giving the child the ability to handle new sounds outside the classroom, particularly in after life.

Some Specific Reforms

A still further change is registered in the way in which certain modes of phonetic translation are favored and others subordinated. If diacritical marks are used, the children themselves mark them less and read them more. The movement is distinctly away from the use of diacritical marks in spelling. Syllabication, as compared with phonetic letter spelling, grows into a relatively large use. The phonogrammic division of words (*f-ield, sh-ield; man-liness, love-liness*) which forces the recognition of larger and more normal sound units, crowds out both diacritical mark and syllable. Words are less often sepa-

rated into their sound units on the printed page; the division is left to the child's natural apperception, which comes through analogy with words he knows or is suggested by a list of words that repeat the same phonogram, syllable, or letter. Irregular words are less often divided; they are treated as sound and spelling wholes.

The Case of the Phonogram

The growth in pedagogical popularity of the phonogram is symptomatic of a general movement away from artificiality toward approximate naturalness. The phonogram is a device which is reforming the method of sight-sound translation, the most formal and traditional of the three modes of teaching children pronunciation. A detailed analysis of the claims made for the superiority of the phonogram as a mechanical unit in phonetic translation explains its sudden and large growth in educational practice. At the pain of repetition these claims are summarized.

Advantages of the Phonogram

The advantages claimed for the phonogram

are many. In the first place it provides a larger unit for the division and identification of new words than any other method of phonetic translation, thus reducing the amount of artificial manipulation of words. In this respect it is far superior to alphabetic and phonetic letter spellings. It induces even larger divisions than the syllable. To be sure, the phonogrammic method may divide words of one syllable (*c-an, f-an, r-an*), but practically everywhere else it leads to larger sound units (*nim-bleness, hum-bleness; gr-ievousness, misch-ievousness*). It is superior to the syllable in another respect, namely, that it separates words on the basis of their sound division regardless of philological derivation or the conventionalized and arbitrary (from the standpoint of sound) divisions of dictionary syllabification. It is a more flexible mode of attack on a word, taking account of individuality and maturity in children. In the case of the word *relationship*, one child, depending on the known units or words that happen to be suggested in his attempt at analogical interpretation, might divide the word thus — *re-la-tion-ship;* and another thus

— *relation-ship*. A very young child just beginning might see it as *re-la-tion-sh-ip;* but a child with a knowledge of more and larger words would see it as *relation-ship*. Irregular words, too complicated to be broken up, are treated as phonogrammic units or wholes (*thorough*), and thus the main bugbears of phonetic-letter translation are avoided. The phonogram as generally used avoids all artificial markings, such as diacritics and accents, so that the child from the beginning sees the word as it will be read or spelled in normal use. Even the division of words by dashes is being discontinued. Every one of these advantages makes toward a decrease of artificiality.

Whether our critical estimate focuses upon radical changes or upon the modifications of small details, the result is the same. The modern teaching of pronunciation shows a growing naturalism in its methods.

IX

TEACHING THE ORDER OF LETTERS

The Central Problem in Spelling

To get the child to write the letters of the word in their proper conventional order is the central problem in the school subject of spelling. As a discipline, it was present in school long before the independent subject of spelling appeared. It was there as an activity subordinate to other studies. As one cannot write compositions without knowing how to spell, spelling was a technique acquired along with writing or written expression. It was the earliest of the historic positions occupied by the spelling discipline. Later, when an alphabetic method became the chief means of teaching reading to beginners, learning the order of letters in a word became an incidental increment in the mastery of the mechanics of reading. Later still, spelling was divorced from reading and became a subject by itself and, like grammar which had divorced itself

from written composition, it came to have formal ends and methods of its own.

Its Isolation made Spelling Formal

It was the transfer of this central problem from a subordinate to an independent exercise, which led to a narrow and isolated method of handling spelling difficulties. For many decades, an attempt was made to teach the order of letters without regard to the meanings and situations with which spelling was always associated in normal usage. This unwholesome way of teaching the subject made it a dull and formal study, which had to be enforced by the powerful but extraneous motives of emulation, which in turn were reinforced by monotonous drills.

Reform has succeeded mainly through attacking this Isolation

For a century the educational reformers have pitted themselves against the traditions fixed in that long period when teachers tried to teach children to spell by reciting the letters in order — and nothing more! Their major successes have

always been the product of some correction of the false view that children could be taught to spell words just by letter-spelling. Spelling methods have been fundamentally reformed just to the extent that teachers have restored mere spelling to its normal setting and function, and brought into the spelling exercise the other factors to which the written order of letters is functionally related. Once mere spelling was the isolated recital of the letters of a word in their given order; now the reformer has made it an interesting exercise in composition where careful attention is given to formal difficulties in a vital and wholesome way.

The Special Technique of Mastering the Order of Letters

We have already indicated how all the elements of good spelling, — meaning, pronunciation, and written order of letters — are being associated in wholesome functional ways. We have indicated, too, how meanings and pronunciations as separate elements are developed within the spelling lesson. It remains for us to suggest the

special methods employed in mastering the third and ultimate element in the complete association, namely, the mastery of the written order of letters.

Oral Spelling

Perhaps the main method employed in the past to master the order of written symbols is "oral spelling." In the method of oral spelling the child always had to master the alphabet-names and symbols as a basis. The child in need of a word for written expression might attempt to translate his own pronunciation into letters, but, if baffled or puzzled, the likelihood is that he would be given the order of letters orally without any presentation of the written or printed form. In consequence, if told to prepare a formal lesson in spelling, the child made his attack through oral spelling, i.e., he looked at the book, blackboard, or other copy, recognized the letters and called their names off in order, drilling on the same.

The Emphasis on Sound Elements

Little emphasis was placed on careful visual-

ization and copying. The emphasis was upon an oral method of mastery and upon a perfection of oral rendition. The spelling match, which was the institution that set the standard for spelling ability through many decades, suggests the elements stressed and the normal manner of teaching them. The final skill toward which spelling study inevitably tended was oral letter-spelling. The word was pronounced to the child. On the basis of that pronunciation, the word was repronounced, letter-spelled, and pronounced again. The entire emphasis was on the oral rather than on the visual side — on sound form and oral letter-spelling rather than on visualizing and writing the words correctly.

Phonetic Translation arises from Oral Spelling

The close association of oral letter-spelling with pronunciation was influential in introducing and perpetuating another typical method, that of translating pronunciation into letters. This is the normal method by which children carry the words of their speech into writing, and therefore into the more artificial forms of oral letter-spell-

ing. But even where the words are outside the oral vocabulary of the child, which is increasingly the case as he goes up the grades, the spelling match and other oral spelling devices made pronunciation the starting point for spellings. Because the final test of good spelling was an oral rendering, the child learned to name the letter order in connection with pronunciation. This connection led to the development of phonetic translation as a mode of teaching and learning.

The Method of Phonetic Translation

All phonetic methods, whether alphabetic, syllabic, or phonogrammic, rely upon giving the child ability to convert the elements of sound into letters or groups of letters which symbolize them. They have this in common, — that they depend upon sound translation. They are different from each other because they use different units of sound and visualization. In varying degree they have a common strength and weakness. The limitations of such sound translation are obvious to any one who will take a critical view.

Its Defective Assumption of Pronunciation

(1) In the first place the method assumes that the child has a perfect command over the pronunciation, which is to be his basis for translation. If he translates a mispronunciation, the spelling is bound to be wrong. The teacher can assume considerable efficiency in sound translation only where the spelling words taught are taken from the oral vocabularies of children who pronounce correctly, i.e., in the lowest grades of a school the children of which are drawn from a cultured English-speaking population. If *catch* is pronounced *ketch*, and *going* is called *goin'*, it is probable that mere sound translation will lead to defective spelling. As soon as the higher grades are reached, and the words selected from the spelling exercises are taken less from the small spoken vocabulary and more from large written vocabularies, there is no guarantee that sound will be a guidance. The child may desire to use a word the meaning of which he has gotten from his reading, and the pronunciation of which is not certain. With a meaning in his mind that

he wishes to write and no pronunciation, the teacher's problem is to give him a definite notion of the form of the word, of the way it looks when written. The apparent need of such a type of work has led to the introduction of the many devices that we class as "methods of visualization."

The Probability of Inaccurate Translation

(2) The method of sound translation has an additional defect in that the limited alphabet with which we write the English language has not so many distinct symbols as sounds. Having the pronunciation, the child must separate the word into sound elements (not a simple and easy matter always), and then find the appropriate symbol for each element. A sound may sometimes be expressed by one letter, sometimes by another, sometimes by two or three letters. A given vowel, for instance, may have a number of values, some of which approximate one of the numerous values of another vowel. All these possibilities decrease the efficiency of any method which aims to give the child the order of letters from

the order of sounds. This second difficulty reinforces the need of depending on visualization and the muscular memory which comes through writing words.

The Breakdown of Translation in Irregular Spellings

(3) Phonetic translation breaks down more or less completely when the child is confronted by the irregular spellings of the English language. Here phonetic translation gives the child a totally wrong first impression, which is effaced only with great effort by the teacher. Silent letters are left out; groups of letters which stand for a single sound are not suggested. The teacher may avoid such irregular spellings as long as possible in the spelling period, but they will enter the child's speech and composition. The correlation between difficulty in spelling and difficulty of meaning or pronunciation is slight, and words enter into the child's usage largely through their appropriateness to his experiences, with extreme difficulty of pronunciation as a minor check. In the more vital methods of contemporary teach-

ing, these irregular words are calling for treatment as early as the child wishes to use them. The old artificial avoidance of spelling irregularities through delay could not conceal the weaknesses of phonetic translation as a method.

The Long Concealment of these Defects

When one considers that methods of phonetic translation have held their dominant position in the schools for more than a century and that teachers of spelling have given them much attention, it seems strange that their insuperable defects should not have become apparent sooner. It has already been suggested that the functional organization of modern school life, and the increased heterogeneity of our school population, largely account for our dissatisfaction with spelling methods. The absence of these factors during previous decades made concealment of inefficiency easy. But there are additional reasons why the method of phonetic translation did not reveal its faults. They were partially corrected by other methods which teachers of common sense hit upon by trial and error, without much knowledge

of the psychological conditions and principles involved.

Copying

One of these methods was that of copying the spelling of words and rewriting them many times. In its earlier uses such written drills were regarded as a means to oral spelling. Written spelling and oral spelling occupied an opposite relation to that which they naturally hold in life and in the more practical and naturalistic teaching of the modern progressive school. To-day, oral spelling is merely one of many means of approach to accurate written spelling. Simply because the true relation of an oral method to final skill in writing words correctly in composition was not perceived, this first use of copying was more or less futile and wasteful. The children wrote their words twenty, thirty, or more times mechanically, taking the spelling from the model last written. There was little noting of visual peculiarities, little associating of form with other elements, such as meaning, pronunciation, muscular memory for letter combinations, etc.

Written Spelling succeeds Oral Spelling

The focusing of attention on written spelling came comparatively late. As a reaction it expressed itself in an isolated and extreme way just as oral spelling had before it. Children learned by writing each assigned word ten times. The teacher dictated the words and the children wrote them in the spelling blank. The teacher or student told off the correct spelling orally and the children marked the errors, writing the corrected forms ten, fifteen, twenty or more times. Such a substitute was not wholly a reaction against an older method; it was partly the product of the pressure for time. It is no accident that this change from spelling matches and other oral spelling recitations comes at the precise period when the elementary curriculum is enriched and the time schedule greatly crowded. All the children can be tested on all the words at once in a written spelling lesson; the spelling match and similar activities had their halcyon days when there was less strain upon a teacher's time.

Developmental Lessons in Spelling

But spelling was not really taught by such means; it was tested and corrected. The developmental lesson, as applied to spelling instruction, was scarcely known in the day of the spelling match and the "twenty-five-words-a-day" spelling blank. It is the very latest stage in our progress. We have already noted in another chapter how the developmental lesson appeared in modern teaching, carefully presenting each element that the child needed to know in such a way that the chance of error would be minimized. Here we are concerned only with the special provision made for a careful presentation of the order of letters that constitute the written form of a word.

Eye and Ear Tests

Special classification of words in order to segregate their difficulties is one device of modern teaching which illustrates our discriminating methods. Regular words that are capable of direct phonetic translation, that is, spelled by sound,

are put together in "ear lists" (*dash, foot*); words with silent letters or vowels expressed by a combination of symbols, where spelling and pronunciation nearly correspond, are brought into "ear-eye lists" (*toad, listen*); and out and out irregular words, ones containing very unusual vowel or consonant symbols, where sound analogies render little assistance, are grouped in eye lists for careful visual study and much written work (*through, vein, ocean*).

It is in connection with such irregular words as would be classified in the "eye lists" mentioned, that the modern teacher has been most ingenious in inventing teaching devices. The versatility of these can only be suggested.

Methods of Visualization

In dealing with irregularly spelled words much attention has been paid to correct visualization on the part of the pupil. To enforce full attention, "flash-card" work has been used to compel the child to visualize quickly and accurately. The teacher exposes for a few seconds a card with the desired spelling, and the child writes it down.

Another modification is for the teacher to write the word slowly and distinctly on the blackboard and then erase it when done. This has the advantage that it makes the child perceive the word in order of actual writing as well as in full final form. Again, irregular portions of troublesome words are underscored or written in color to center attention on the particular part. Long words which confuse by their length, are broken up to reveal familiar words or other units (*child-hood, enfeeble-ment*). Words with similar combinations (*cough, enough, rough*) are compared. Homonyms are carefully compared and differentiated (*their, there*). Mnemonics are used to eliminate confusions (as when the dome of the structure is associated with the *o* in *capitol* to differentiate it from *capital*). Many repeated visualizations, oral spellings, and writings are given in the case of special irregularities. All these varied methods represent the resource used by the modern teacher to present and fix proper spellings for the child.

Print or Script Models

The whole purpose of such careful efforts at

visualization is to get the child to see the word in its correct form from the beginning and to safeguard him in advance against any probable misspelling. So careful are some teachers to insure a correct visual impression from the start that they insist that words should be presented and mastered from script rather than from print, as the average child will write, not print, when he spells. Very few texts in spelling have adopted the suggestion. It is expensive and against tradition. It may be, too, that the promised advantages are not sufficiently large to warrant the extra trouble, even though increased efficiency were certain.

On the whole, then, the technique for teaching the order of letters in spelling has undergone revolutionary changes in the last quarter-century. The methods of teaching are much more complicated. Written mastery takes precedence over oral spelling. The emphasis has passed from dependence on regularities between pronunciation and spelling to a careful focusing of attention on irregular elements in words. Spelling is now really taught and studied at school rather than

merely tested. Careful presentation of difficulties to avoid error, particularly through visualization of spelling forms, occupies most of the recitation time which formerly was given to the hearing of lessons and the correction of errors.

X

DEVELOPING THE PUPIL'S INDEPENDENT POWER

Teaching Children to study Supplementary to Instruction

THE teacher has more functions than teaching a child to know, pronounce and spell a certain group of words with persisting accuracy. In addition to instructing the child, he must show him how to study; in this case, how to get by himself the meaning, sound, and spelling of words that are unfamiliar to him. The teacher may successfully transmit all the words needed by the child and required by the course of study, but his task is still incomplete. He must train the child to solve new spelling difficulties as he will meet them in later life outside the school. To do this the beginning must be made at school, while he is still under the supervision of the teacher.

Four Characteristic Types of Activity

There are four conspicuous types of work which the spelling period assumes in order to give the pupil an enlarged power to know and settle his own spelling difficulties without the aid of the teacher. These are: (1) the use of word-analysis; (2) the application of spelling rules; (3) the use of the dictionary; and (4) the training of the child to direct himself in the extension and correction of his own vocabulary. Each of these will require consideration in turn.

Word-Analysis

Twenty years ago word-analysis was a study by itself, closely affiliated, however, with spelling. It often utilized texts in word-analysis separate from the usual speller. Frequently, too, it had a time-assignment of its own in the weekly schedule, either completely taking the place of spelling in the highest grammar grades or sharing with spelling the time usually assigned to the latter subject in the various grades. Thus spelling might have two periods per week and word-analysis three, or

vice versa. The work was formal, as formal as the spelling of thirty years ago. Its relation to spelling was in controversy much as the relation of grammar to oral and written composition. So that word-analysis, or word-study, as it is now often called, went up and down in favor along with formal grammar and rules for spelling. The same movements in pedagogical thought were behind each of them.

The Reaction against Word-Analysis

A reaction against word-analysis finally occurred, and it almost disappeared as a subject-heading in courses of study. A few conservatives hung on to the title; others incorporated it as a definite part of spelling instruction. Some of the texts in spelling which had excluded formal word-study now included it in the last chapters, as a kind of appended text in word-study. It disappeared from many texts except for casual uses of prefixes, suffixes, and stems in exercises scattered through the book.

Its Restoration in Spelling

Of late, however, word-analysis has had a res-

toration. It now appears throughout the intermediate and grammar grades, wearing a less formal and forbidding countenance than it once had for the child. As though to forget its own reputation, it appears under the new names of word-study and word-building. It has also lost much of its deductive spirit. The child is no longer required to memorize lists of prefixes, suffixes, roots, and definitions, making application and use of them at some later hour or day, or not at all. As incorporated in the better spellers, word-study is conducted in a distinctly inductive spirit. When the children have added to their vocabularies enough words with a common root, prefix, or suffix, the unit of derivation is brought into consciousness through comparison, its meaning established, its derived forms identified, and its applications extended. With a chastened spirit becoming to it, word-analysis has given up its independence and become an accessory to the subject of spelling, performing its several special services with a modesty appropriate to its place.

Word-Analysis and Word-Building

The desire to avoid an old term doubtless had something to do with the substitution of such phrases as *word-study* and *word-building* for *word-analysis*. Yet in present usage they are not really equivalents. The reaction which drove out the subject was against an activity as well as a name. Word-study as a term is variously used in spellers. *Word-study* seems to be the more inclusive term, expressing the child's study of words both analytically and synthetically. *Word-analysis* emphasizes the analytical aspect which separates words into their units of derivation; and *word-building* refers to the opposite process where children, having the prefixes, suffixes, and stems, are trained to construct additional derivatives, new to them. Generally the two latter processes are subsumed under the term *word-study*, though for the purposes of spelling instruction they have a different value.

The Worth of Word-Study

The value of word-study, particularly word-

analysis, in giving the pupil an enlarged independent power to solve new spelling difficulties, must not be measured merely in terms of the aid it gives in spelling a word. It was largely because of this exclusive standard that the reaction against word-analysis set in ten or fifteen years ago. It was felt that the assistance was too slight and too indirect; that it was better to master words outright by direct memorization than to arrive at an approximate but uncertain conclusion through the encumbrance of many explanatory roots and affixes. Our schools were then interested mainly in immediate results. Mere instruction dominated classroom teaching, as the attempt to give children independent power by teaching them to study was not yet emphasized. Of course it has to be admitted that word-analysis sometimes assists spelling directly, as when a child about to spell the word *Mediterranean*, finds himself in doubt as to whether the *t* or the *r* is to be doubled, and gains an immediate answer through word-analysis. But the degree to which it assisted was then much in doubt, and it was difficult to believe, on the basis of the

functions the spelling period then possessed, that it was large.

Nor would the very small aid that word-study renders to pronunciation, which as a function is now more important in the spelling period than before, greatly help the argument for the use of word-analysis. Of course the child must attack a new word in sound units of some sort. As the best units are frequently those which keep true to the history of the word, word-analysis does aid the pupil to break up a word into convenient parts whether these be syllables, or phonograms, or combinations of both. But it may be contended with some show of evidence that every such gain in independent power to pronounce words, may be got equally well by the method of phonogrammic identification which utilizes the child's natural tendency to separate new words into words and parts of words already known to him. The use of syllabication and classification upon the basis of similar phonograms, two devices now much used, must have quickened his power to recognize parts of old words in new ones.

But some word-analysis sanely handled gains an enlarged worth the moment two facts are admitted: (1) That the responsibility of the spelling period for developing the meanings of words has greatly increased; and (2) that word-analysis materially assists the child in getting the approximate meaning of words in normal context, when he is away from teacher and dictionary. It is not contended that the method of word-analysis is an efficient and economical means of teaching a child the meaning of a word; it is not. There are a half-dozen better ways. Telling him is one. The value of word-analysis lies in the fact that it enlarges the child's power to get the meanings of strange words for himself after he has left school.

Such word-study gives a considerable extension to the child's power to get the meaning of words, but it does not take the place of the dictionary. The constructed meaning which comes through word-analysis merely approximates or suggests the signification of the word. This is fully recognized by teachers and authors of texts, for some of the better treatments not only sepa-

rate the word into its derivative parts and give the meaning derived from the parts, but they follow it with accurate definition and illustrative sentences. Accurate dictionary work with much application of the meaning in speech and writing must be the final supplement of word-study. Even efficient dictionary work requires that the pupil have some notion of the word's meaning and use, for almost every word has several meanings one of which is to be chosen.

The Use of Rules

If the main value of word-analysis lies in suggesting the meanings of words, the principal worth of teaching rules of spelling is to give children independent power to spell words that are used in changing form, exactly the situation where word-analysis helps least or actually confuses. In progressive practice the teaching of rules has gone through about the same modifications as word-analysis. It was overdone twenty years ago, the reaction against formal deductive ways of teaching tending to eliminate it completely; now there is a tendency towards its

restoration to a restricted place with a much changed emphasis and use. Even a casual comparison of old spellers with new ones reveals the conspicuous changes which have occurred in the attitude toward the use of spelling rules.

The Inductive Teaching of Rules

In the first place spelling rules are now taught inductively. When the children have mastered enough individual cases to afford a basis for generalization, the rule is induced by the child from his own knowledge. The better books do not call for the memorization of many rules, with numerous exceptions, followed by a study of more or less unfamiliar illustrations. The teacher is quite content when the child merely senses the general principle, and refrains from any verbal formulation of the rule. Some of the better texts still print the rules with illustrations, but specifically state that they are to be *taught inductively*. But the very statement of the rule, preceding the concrete illustrations, must tempt more than one old-fashioned teacher to ignore the injunction and follow the order of the book. One of

the best books escapes this weakness by grouping typical words previously learned under such captions as "double the last letter and add *er*," "add *less*," etc. Each typical series has its typical interpretative caption, the rule and its exceptions never being written out.

The Small Number of Rules used

In the second place the number of rules taught is small. Not more than four or five sets of rules are included. Words which do not fall under these are studied as individual words, without any reference to laws which would indicate their conformity to type. Thus the burden on the child's memory is lightened by a reduced quantity of rules and by the vital way in which mastery is induced.

The Use of the Dictionary

Training children to a competent and ready use of the dictionary and fixing the habit of consulting it, is one of the main duties that the school can perform for the student. The dictionary will take the place of teacher and spelling book, once the child has left the school. Without

the impulse to use the dictionary or the ability to interpret it, the child is without the capacity for making further advances in a definite and accurate way. The emphasis upon the right use of the dictionary cannot be too great, particularly in the upper elementary grades.

The Specific Demand for Dictionary Work

In general there has never been adequate demand in our courses of study for teaching the child to use the dictionary. It has been assumed that somehow in the course of school events, the child would pick up this ability. That he does not do so has been demonstrated in many cases. Some children as high as the fifth and sixth grades, owing to the fact that the alphabet is no longer learned in beginning reading, are incapable of finding words in the dictionary. Such discoveries as these have led to a demand that dictionary work be assigned as a specific responsibility for the teacher. For obvious reasons it has been assigned to the subject of spelling, and is usually begun in about the fourth grade.

The care given in teaching pupils to use the

dictionary is a contrast to previous slipshod methods. It might be well to note how thoroughly each step in the process is developed by the modern teacher. First, the alphabet is reviewed to see if it is well within the child's easy habitual command. Then the child is sent to the dictionary to find simple words the spelling of which he knows. At first these words have different initials to establish the simple principle of alphabetic order. Later, words beginning with the same initials are assigned to show that the initial letter alone does not determine the place of a word in an alphabetical list. Thus, the principles of alphabetical and sub-alphabetical arrangements are mastered. And last, words, the spellings of which are doubtful to the child, are given ; and the child is taught to scan the pages till he finds them. Special exercises are given to show a child how the pronunciation (*lesser, lessor; least, lest*) or meaning will assist him to find the word when the spelling is in doubt (*capitol, capital; limpit, limpid*). Special exercises are given to show the child how to determine which is the preferred spelling when there are two.

Exercises in finding pronunciation are given in the same careful way until each technique is taught, — preferred pronunciations, the interpretation of diacritical marks through the key words at the bottom of the page, the meaning of the accents, etc. Then the child is drilled until he can readily determine the meaning of a word. The abbreviations for the parts of speech are explained. He is encouraged to read all the meanings, avoiding those marked "rare," "colloquial," or "obsolete," and to select the most likely meaning with the aid of the examples of usage. No child can be carried through such training without forever after having the power to determine the meaning, pronunciation, and spelling of words for himself.

Methods of Self-Cultivation

But it does not suffice that a child shall be told the right way to pronounce or spell a word, or that he be shown how to find it for himself. Self-growth is dependent upon the development of the child's sensitiveness to clashes in usages, whether they be in speech or in print. Let a

child be skeptical of his own usage every time he sees or hears a conflicting one, and the basis for self-cultivation is laid. Then give him the persistent habit of appealing to a dictionary and he will learn the right form. Last, train him to fix the spelling, pronunciation, and usage by repeating them through every possible channel of association, and he will steadily increase his spontaneous command over words and their functions.

There is far too little teaching of the child to correct, and drill himself in our schools. It needs to be done. Isolated teachers have already made a start that ought to be imitated by all teachers.

XI

TESTING SPELLING

Testing as an Exclusive Activity

SEVERAL decades ago the spelling period was almost completely given over to testing the efficiency of the children's spellings. The teacher assigned a lesson and the children prepared it at home or in a study period at school. The noting of spelling errors was thus the major activity of the children when under the direct supervision of the teacher. Beyond assignment, testing, and correcting, little was done. Teaching spelling in the sense of giving a careful presentation of words so as to guarantee correct first impressions of words was scarcely given any emphasis, if, indeed, it was given any place at all.

The Subordination of Testing

Since then there has been, in the best schools, a complete reversal of emphasis; testing as a function of the classroom exercise has been sub-

ordinated. Instead of usurping a major portion of the time, it has become a step or stage in the spelling lesson and no more. The smaller number of words taught per day has made this possible. The increased emphasis on a careful development of new spelling words, and the tendency towards a more careful correction of spelling mistakes have together squeezed the old function of examination into a smaller time allotment. Traditionally the testing of spelling has taken one of two general forms: (1) oral spelling and (2) written spelling. Each of these has had a considerable number of variations.

Early Emphasis on Oral Spelling

The early connection of spelling with oral reading gave emphasis to oral spelling as a form of examination. This is attested by the great popularity of the spelling match during the period when spelling first gained an independent place as a subject. In fact, for a long time, teachers seem not to be conscious that the final way in which a child spells in normal life is through the written form. The test of perfect learning gen-

erally utilized was the ability to give the names of the letters orally in their proper order.

Its Artificiality

Such oral rendition was naturally artificial because the activity of spelling was not seen in its normal function or setting. It stood out of relation to its practical uses or to the other school subjects. Naturally in the wake of a system which emphasized oral rather than visual forms, oral renditions rather than the writing process, other symptoms of the subject's formalness and artificiality appeared. Words were not studied in context, but in isolation. Hence, if the words included within a given day's assignment had any organized relation to each other, it was not that of common presence in a sentence or paragraph expressing a unit of the child's thoughts, but rather that of a list of words casually related by some unifying principle largely present in the teacher's mind, e.g. — a common element of sound construction (*might, fight, right*) or a common membership under some general name (*tools, colors,* etc.). More frequently the spelling lesson was a

list of unrelated words without any pretense of relationship. Spelling lists were more or less haphazard collections of words that the child needed and was deemed able to spell at about this point in his school career. At first the children probably recited spelling, as they did any other subject, on the call of the teacher, either at random or in some regular order.

The Appearance of the Spelling Match

Of course children driven to meet such a test, without motive inherent in the activity itself, got their stimulation in terms of adventitious school honors or escape from school humiliation. Pride or fear of a standing in the class marks and competition or rivalry with their fellows, were the chief sources of motivation. And the teacher in the effort to get better results enlarged the devices that would support these artificial psychological means. The great device evolved was the spelling match, with its intense competitions and high honors. It became the dramatic event of class life. When it was extended to include class and school competitions the enlarged

pressures of group rivalry were placed behind the pupil's work. The community became interested, and the spelling match of the elementary school stirred an interest comparable to the intercollegiate football struggles of the present day. Even the adult members of the community indulged themselves in this fascinating test of superiority and it became a kind of intellectual town sport.

Its Shortcomings

The tracing of the forces which made the spelling-match test important has already suggested its limitations. The oral spelling match still further beclouded the truth that written contextual spelling is the only real and final test. It emphasized peculiar and difficult words, little used in common life. It focused attention upon the rare speller, as keen competition of this sort usually does, and neglected the modest needs of the less able child. In time all of these defects were perceived, but the process was a slow one.

Reaction against the Spelling Match

Many factors contributed to the reaction against

the spelling-match system. Attention was necessarily distracted from the subject of spelling when new subjects entered the schools. A crowded curriculum did not permit of the former extravagant devotion of energies to spelling, and the doctrine of individual teaching dragged the laggard and the weakling into the teacher's consciousness.

Written Tests supersede Oral Recitations

A return to the older type of oral recitation was not possible. It went down with the spelling match that superseded it. It was too slow. All the children could not be tested in the short time allotted. Some more economical method was required. It was found in the written spelling lessons, where all the children wrote their tests from the teacher's dictation.

Testing by Dictation of Sentences

At the start these written dictation lessons were hardly less formal and artificial than the previous oral tests. Spelling was still a test of isolated words without context or much stress

upon meanings. But a better psychology of teaching was subordinating the formal subjects to the experiential activities of school life. As words were more often selected from the children's uses and needs, it was possible to test their ability to spell in sentences. Sentence dictation superseded, in part at least, the older list dictation, or paralleled it as an occasional or even constant exercise of the spelling period. This tendency has recently grown. And so clearheaded have some teachers become that they do not regard efficiency in spelling from sentence dictation as any more than a very good approximate test, for they look to correct spelling in spontaneous written expression as the only real and final standard.

The Place of Oral Work

It must not be implied, however, that there is no place for oral spelling and the spelling match as modes of testing. The best current practice does not eliminate these, but uses them in their appropriate places without abuse. With young children it is necessary to be certain that the

right first impression has been received, and a teacher may quickly test up her developmental work by rapid random requests for oral spelling. A child's trouble may frequently be revealed to the teacher by an oral rendition, when the slower method of a written exercise would conceal it. A similar sort of reservation needs to be made with regard to the spelling match. It has very conspicuous limitations as a daily or even as a weekly exercise, but it has decided advantages as an occasional method of review. It affords a stimulating and interesting change of activity from written reviews. If properly conducted, it can be used as a sharp check against guessing at the spelling of words.

The tendency in the evolution of methods of testing children's spelling abilities is marked. It moves steadily toward methods which (1) foster the use of better motives in learning to spell, and (2) measure efficiency in situations which are nearest like those of normal use.

XII

THE CORRECTION OF MISSPELLINGS

The Weakness of Previous Corrective Teaching

THE purpose of all testing is to discover the spelling mistakes of children. But discovery of error necessitates the correction of the fault. The older practice of teachers was strong in discovery and weak in correction. The current method of correction usually consisted in sending the child back to the correct form, and leaving him to discover the technique by which he could overcome his difficulty. Usually the child found no other technique than the mere repetition of oral spelling or the copying of the visual form a given number of times. The child exercised no ingenuity because he was incapable of diagnosing his own case; and the teacher suggested none for he was scarcely aware that there was more to do than to drill upon the word. Such attempts at the correction of children's errors were weak chiefly because they were futile.

The Difference between Original Learning and Correction

Re-learning an old word correctly, after incorrect habits have been formed, is vastly different from learning a new word about which the child has no misconception. To send the child back to the old form to "learn it anew" is not the simple matter that is implied. Every teacher in his more thoughtful moments knows that the path from ignorance to knowledge is easier and less complicated than that from error to knowledge. In one case a habitless child forms a habit; in the other, the pupil must break one habit and form a new one through conscious effort.

Failure to apply the Distinction

The attitude of recent theorists and contemporaneous writers of textbooks, shows that the distinction is by no means applied. This is clearly brought out in discussions on the teaching of homonyms. One set of authors says that all words containing similar elements should be completely dissociated, that is, studied one at a time in

complete separation from each other. Another group of writers states just as emphatically that words with similar elements, which inevitably lead to confusion, must be brought into consciousness together, then compared and differentiated. Such experiments in comparative teaching as have been conducted give evidence that the first group has generalized from the teaching of new words to young pupils and that the second group has derived its principle from the correction of errors among older students. Each has made a generalization from one situation and falsely applied its truth at large. They have not made the distinction between proceeding (1) from ignorance to knowledge and (2) from error to knowledge.

Normal Stages in our Progress

Only slowly has this distinction between the presentation of new spellings and the correction of misspellings been brought to the attention of teachers. One might say that the profession at large has not yet recognized it. It is not surprising that distinctive methods for the correction of

spelling errors are just beginning to be evolved. They could scarcely have appeared sooner, since the teaching of spelling, as distinguished from the recitation of spelling, is a very recent procedure. In the evolution of our spelling methods, the periods in our progress are thus characterized: (1) In the early period spelling is merely tested; (2) later it is taught and then tested; and (3) now it is taught, tested, and corrected.

The Psychology of Presentation applied to Correction

The awakening of the teacher to the idea that spelling needs careful primary presentation, just as any other subject does, was the basic step in suggesting that he must also have a special method for correcting misspellings. Much of the psychology that underlies good instruction in new words is coming to be applied to the correction of mistakes. The mere fact that developmental teaching and good lesson assignments came into existence out of the teacher's desire to prevent wrong impressions and false habits,

focused the teacher's consciousness upon the causes of spelling errors. It was only an additional step upon the part of the thoughtful teacher to begin to treat misspelling by special methods devised for that purpose.

The Gross Defects of Old Corrective Methods

Let us look for a moment at the traditional methods employed for the correction of errors. If the child misspelled a word, the correct form was set for him on paper or blackboard. The child, looking at the form, copied it below, — ten, twenty, or fifty times, as might be required. It was purely a mechanical exercise. Each time he wrote, he scarcely thought of its meaning; he did not necessarily think of its sound. In all probability he did not translate its sounds into letters, he merely imitated the form he saw. It was more nearly an exercise in penmanship than in spelling. That it was mechanical and thoughtless is suggested by a very common experience. Every teacher has noted that a child mechanically copying words might misread the form, mistaking an *e* for an *i*, or an *o* for an *a*, thus

misspelling the word. The careless misspelling was then copied in the successive repetitions. It was a kind of correction which did not correct. The teacher did not guarantee a motive for the child's effort or a means for guaranteeing a full association of all the elements involved in good spelling, — meaning, pronunciation, and written form. The child's whole attention was on copying, mastering a written form out of the normal setting of its use. The result was that, in many cases, the very child who had written a word fifty times would misspell it in the composition class. There the chain of connections starts with a meaning, revives the pronunciation, and leads him straight to the old association with a wrong form because *the misspelling was acquired in normal setting*. If he had thought of his error every time he wrote the new form, the corrective work might still have been successful, for when he started to write the old and incorrect association the new form associated with it by the corrective repetition might have inhibited and diverted him to the new spelling. But the column copying did not even guarantee in-

hibition. A true correction can be made by substituting a completely new chain of associations, without aiming to use an inhibitive associate. The teacher should establish a new neural path beginning with meaning and leading through pronunciation to correct written form, and exercise it so well that it would become the path of least resistance, leaving the whole incorrect association to fade out through disuse.

Individual Treatment the Essence of Good Corrective Work

The essence of good corrective work lies (1) in individual teaching and (2) in sufficient time for the formation of new habits. As long as the mass teaching of classes was our exclusive practice, any real correction of errors was impossible. One can teach new words to a whole class by group instruction, because all the children require them; but misspellings are likely to be far more individualistic in their distribution. Even when children misspell the same words, the misspellings will be different. And when the misspellings are alike, the causes will vary. The error in one case will

be due to the fact that the child did not see the form correctly; in another, to faulty pronunciation; and in a third, to mere carelessness in writing. The first requirement is good individual diagnosis. The second is suggestion by teacher to child of concrete exercises designed to correct the error. These must be sufficiently simple for the child to be able and likely to carry them on by himself. And then there must be some account kept of these individual tasks, so that the teacher may re-test for the purpose of knowing if the correction has been made. The individual spelling lists, previously discussed, which are made up of words which the child either does not know and is told, or which he has actually misspelled, should be utilized to check up the efficiency of such individual corrections.

The Need of Time and Exercise for Habit Formation

But it takes time to substitute new habits for old, and the average teacher is far too impatient of error to see that its causes are deep seated. It is easier to attribute error to childish perver-

sity and to administer moral blame than to seek its psychological causes and treat them with persistent and thoughtful attention. How often does the teacher correct the child's error at one moment and expect him to know the word the next! If the pupil slips up on the word the next moment the instructor is more likely to blame than help, as though the pupil were morally culpable. His error is treated as a matter of sin, not as one of gradual habit formation. The child should be interested in the need to correct. He should be given considerable exercise in the normal use of the right form, so that the new habit may grow into a lusty competitor of the old. The teacher cannot get the result at once. In the early stages of correction it may be that the child will spell the word correctly in the spelling period and lapse in his composition where the mind is centered upon ideas and form is merely in the margin of attention. This is not a discouraging fact; it is rather a characteristic symptom of the first stages in reform. Later, in the spontaneous written exposition of his thought, he may be inconsistent in his spelling, — sometimes spelling

the word as it should be and sometimes not. This should be a source of hope, not of despair, for it marks a middle stage of growth. It is only in the last stage that the new habit becomes completely ascendant and the word is spelled with consistent correctness. The teacher should remember that there are stages of growth in correcting spelling errors as there are in everything else. A single reprimand or caution by the teacher does not correct a mistake, it merely presents the problem. Motive, time, care, and exercise are required to modify an error.

Up to twenty years ago the characteristic activities of the spelling period were a mere examination of the child's ability to spell and a drilling upon the correct form of misspelled words. Within the last decade the prevention of error, rather than the testing and noting of errors, has become the major activity. Apparently we are now about to devote an increased energy and ingenuity to the weakest spot in the spelling lesson, — the correction of misspellings. We are ready to develop a technique which will adequately correct those misspellings which escape all the

anticipatory efforts of our best teachers. It is in the diagnosis of spelling errors and in the skillful substitution of new and correct habits that we shall find our largest immediate opportunity for improving our methods of teaching spelling.

XIII

THE QUANTITY OF FORMAL INSTRUCTION

Fewer Words assigned per Lesson

THE change from the testing to the teaching of spelling in the class period has had a more or less immediate effect on the quantity of words assigned to the child for mastery within a given day, week, or year. The simple and formal hearing of spelling words permits an assignment of from fifteen to twenty-five words for each lesson; the elaborate treatment of a developmental method of teaching makes it impossible even to seem to cover so much ground, and the number of words assigned for each day's mastery gradually decreases. The extent of this change is indicated in the radical proposal of some of the best teachers and textbook writers that only three or four new words per lesson should be assigned in the primary grades and only five or six in the grammar grades.

The Smaller Vocabulary demanded

The pressure of new and elaborate methods of teaching has reduced the assignments materially, though considerable variation is still characteristic. The reduction has found sanction in scientific analysis and investigation. Some investigators claim a child cannot master as many words as the old system demanded of him, that cramming with temporary efficiency concealed much superficiality in learning and that spelling errors were never adequately corrected. Quite regardless of the inefficiency of large assignments, others urge that large assignments are unnecessary. These quote authority to show that the writing vocabulary (as opposed to the larger reading vocabulary) of the average person does not usually extend much beyond three or four thousand words, while even the best spellers which have greatly reduced the size of their vocabularies still include a minimum of about six thousand words. From this point of view three thousand new words, or less, distributed over eight school years of from eight to ten months

each, make a thorough mastery of very small daily assignments of words completely adequate. The argument for fewer words is sound. The implication that every word in the speller must be taught is not. Every teacher requires more spelling words in his text than he teaches to any one child. The environments, the courses of study, the class and personal needs of children vary so much from one part of the country to another that texts intended for general use must be large enough to cover the variations in common need. But just as fewer words are taught the individual child than before, so fewer words are included in modern texts than in the traditional books. Thus both class teaching and texts utilize smaller vocabularies. On grounds both of psychological efficiency and of social demand, the amount of work required in spelling has steadily decreased.

Reduction in Time Allotment

The movement for small assignments in spelling has had the secondary effect of reducing the time allotted to the formal study of the subject. Within recent decades there has been great var-

iation in the time allotted to the subject of spelling. The larger city school systems show a variation anywhere from three to ten per cent of total recitation time assigned. But wholly regardless of variation the allotment has been cut down from one quarter to one half, in practically all school systems.

Less Frequent Periods

The decreased time allotment has had an inevitable effect upon the spelling period. Resulting adjustments have been made in two distinct ways: (1) the cut in time has been evenly distributed over five daily recitations; or (2) in order not to make a teaching unit too short, three or four rather than five periods have been used. But the practice does not consistently follow one or the other plan, for there is considerable variation, different policies being followed in primary, intermediate, and grammar grades.

Distribution through the Grades

For example, there is a marked tendency to-

ward five periods a week with the youngest children, three with the intermediate pupils, and two, or even one, with grammar-grade children. Occasionally, when the work in the grammar grades becomes testing rather than teaching, as the older pupils are supposed to be able to study words and correct errors by themselves, five very short periods are utilized for formal work.

The Elimination of Formal Study

The tendency to vary the distribution of spelling periods also expresses itself in a movement toward the complete elimination of the special spelling period. There are four distinct symptoms of this tendency: (1) The subject of spelling is given no special time assignment during the first half or the whole of the first year. (2) The spelling period disappears from the higher grammar grades and is taught incidentally, that is, in connection with the other school subjects. (3) The time assignment for spelling is included under that of language and the subject is thus subordinated. (4) The theoretic proposal is made that a superior incidental teaching of spelling through-

out the grades is just as effective as formal instruction in special class periods.

Formal Work in the First Grade

The beginning of the formal teaching of spelling is now quite usually delayed till the second half of the first school year or till the beginning of the second grade. There have been arguments and influences behind this tendency other than those already mentioned. The primacy of reading in the first grades has somewhat delayed the introduction of such formal subjects as arithmetic, penmanship, and spelling. The delay of written composition and penmanship postpones the need to know how to spell. Under modern methods of teaching children to read, spelling is unnecessary for the beginner; it is, like penmanship, one of the subordinate techniques necessary to written composition; it appears in the curriculum the moment the emphasis is shifted from oral to written expression.

Formal Study in the Higher Grammar Grades

In the higher grammar grades the tendency

towards the reduction or elimination of formal study in spelling rests upon different grounds. The increased dependence upon incidental acquisitions of spelling, particularly of vocabularies peculiar to geography, arithmetic, history, and science, has reduced the need for extensive treatments in the spelling period, and curtailed the necessity for continuing the formal study of spelling in the highest grammar grades. Again, by the time the pupils have reached the higher grades the expediency of having the teacher develop new words and correct errors is questionable. The child who has been carefully taught in the lower grades is supposed to have acquired a spelling vocabulary for intimate daily use, and such new words as he needs to master he should learn for himself. It is the time in the pupil's school career when he ought to show power of independent study and self-correction, when he ought to become self-reliant. So here the teacher merely takes a short time for the formal testing of spelling lessons or else takes care of new words and misspellings as they occur incidentally in the process of instruction in the other subjects.

Complete Elimination of the Spelling Period

The tendency to lump the spelling assignment with that of language in general is indicative of a movement which at one time attained a wide theoretic acceptance, but the application of which in practice is restricted. This was the movement toward abolishing the spelling period entirely and depending upon the incidental teaching of spelling words. Two current tendencies gave sanction to this step: (1) the increasing impetus toward reducing the time assigned to spelling; and (2) the erstwhile professional influence which the doctrine of the correlation of subjects attained. Further sanction of a scientific type was given by the investigations of Rice and Cornman. Rice showed the waste of long-time periods under existing methods of instruction, and Cornman indicated that the prevalent special instruction in spelling was not superior in results to a careful and superior use of incidental teaching.

Thus changes in pedagogical practice, psychological criticisms, and better appraisals of social demand have greatly affected the time allotment

and time distribution in the teaching of spelling. They have diminished the percentage of school recitation-time given to the formal study of spelling, decreased the number of spelling periods per week, altered and varied the time distribution of these periods among the various grades, and in some places actually eliminated formal instruction in spelling.

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